DOWNEYBRAND

Melissa A. Thorme
mthorme@downeybrand.com
916.520.5376 Direct
916.520.5776 Fax

Downey Brand LLP
621 Capitol Mall, 18th Floor
Sacramento, CA 95814
916.444.1000 Main
downeybrand.com

July 11, 2016

VIA EMAIL – pamela.creedon@waterboards.ca.gov and clay.rodgers@waterboards.ca.gov

Ms. Pamela Creedon
Executive Officer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

Mr. Clay Rodgers
Assistant Executive Officer
Central Valley Regional Water Quality Control Board
1685 E Street
Fresno, CA 93706

Subject: Comments on Tentative Waste Discharge Requirements/General Orders for Oil Field Discharges to Land

Dear Ms. Creedon and Mr. Rodgers:

Enclosed please find the following comments submitted on behalf of Valley Water Management Company ("Valley") on the three Tentative Draft General Orders (GOs) for oil field discharges to land. In addition to these comments, Valley incorporates by reference its earlier comments to the extent that those comments still apply.

Comments on General Orders and Information Sheets:

- Adoption of these GOs appears to be premature and jumps ahead of the stakeholder driven process being used by the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTs). CV-SALTs is right now undertaking an effort to establish a consistent salinity permitting strategy that can be employed to regulate all discharges region-wide. The early adoption of these GOs will put oil field dischargers on a pathway that may be radically different from any eventually adopted permit strategy for salinity, forcing dischargers to expend resources and efforts that are potentially wasted.

Request: **Defer adoption of the GOs until the salinity permitting strategy being developed by CV-SALTs is completed.**

- Valley continues to have difficulty understanding why these three GOs could not be adopted as a single order. One order could include varying requirements, the applicability of which

would depend on the quality of the produced water and underlying groundwater. Even after modifications based on Valley's previous comments, the three GOs continue to have slightly different or inconsistent language and wording with no explanation for the differences. In addition, there are three separate Monitoring and Reporting Programs (MRPs), three information sheets, and three Attachments A and B for each of the GOs even though these documents should be virtually identical. Having a single permit with three compliance tracks would streamline the permitting and compliance process and be more in line with the Lean Six Sigma principles that have been adopted by the Water Boards.

The fifth principle in Lean Six Sigma is the law of complexity. Simply put, the goal is to keep things simple. When a process is complex and difficult, it may have elements that are not necessary. More complexity does not necessarily mean more value or more importance. In fact, it could mean just the opposite. For dischargers like Valley that may have facilities in one or more of the different categories, having a single permit would make compliance much less complex.

Request: **Reconsider adoption of 3 GOs and consolidate into one GO with varying compliance requirements where needed to differentiate different effluent and groundwater quality.**

- The GOs differentiate the types of discharges based on whether or not the "maximum oil field discharge salinity limits" are met. These limits are not water quality objectives or instantaneous effluent limitations, yet are being treated as such, without compliance with Water Code sections 13241 or 13263. Further, the limits do not comply with Water Code section 13242 requirements for a legal implementation plan because the limits fail to provide a time schedule for actions to be taken and a description of the surveillance to be undertaken to determine compliance with water quality objectives.[1] In addition, the GOs' findings applying these limits do not recognize the Tulare Basin Plan Implementation Plan's exception language, which explicitly allows a discharger to have higher or different limits if certain demonstrations are made to the Regional Board.[2]

Request: **Do not utilize the Implementation Plan numbers as water quality objectives or effluent limitations against which discharges are measured. The point of compliance should be in the groundwater and should be measured against adopted water quality objectives.**

- Each of the findings in the GOs referencing the "maximum oil field discharge salinity limits" should spell out that an exception process exists. Furthermore, these limits, which are 1,000 μmhos/cm Electrical Conductivity (EC), 200 mg/l chlorides, and 1 mg/l boron, except for in

[1] It should be noted that the Basin Plan does not contain a numeric water quality objective for boron. Any discussion in the GOs and Information Sheets about translation of the narrative objectives must include a consideration of site specific factors.

[2] *See* Basin Plan at IV-15 ("Discharges of oil field wastewater that exceed the above maximum salinity limits may be permitted to unlined sumps, stream channels, or surface waters if the discharger successfully demonstrates to the Regional Water Board in a public hearing that the proposed discharge will not substantially affect water quality nor cause a violation of water quality objectives.")(emphasis added).

the White Wolf subarea, are being applied as concentration-based instantaneous maxima when there is no support for this interpretation in the Basin Plan or in science.[3] These "maximum" limits are for constituents that are for the most part regulated as secondary maximum contaminant level (SMCLs) for drinking water and are not regulated as toxics for human or aquatic life (see accord 40 C.F.R. §131.38(b)(1)). Thus, these limits must be defined in terms of what period is expected for compliance (which would presumptively be as an annual average consistent with regulation of SMCLs). Given these are not acutely toxic constituents, and are being discharged to land with some level of attenuation through the soil and aquifer, the annual average should be the appropriate compliance time step, not instantaneous maxima. *See In the Matter of the Own Motion Review of City of Woodland*, SWRCB Order No. WQO 2004-0010 at pg. 15 ("Implementing the limits as instantaneous maxima appears to be incorrect because the criteria guidance value, as previously stated, is intended to protect against chronic effects.").

Request: **If the Implementation Plan limits are used, they should be interpreted as annual averages.**

- The lack of a specific date in paragraphs 1.c. and 2.c. of GO1 and similar provisions in the other two GOs is problematic. Valley made this comment previously, but the problem was not corrected. A specific date should be inserted, and January 1, 2015 makes the most sense to make the date coincide with a new year. The current language of paragraph 1.c. is "began discharge of wastewater [to pond(s)][4] prior to **January, 2015**." As currently stated, this would mean December of 2014. On the other hand, the current language of paragraph 2.c. is "began discharge from **January, 2015**." The word "from" replaces the word "after" in the previous version, which would have meant after February 1, 2015. The new "from" language also inserts confusion that could have been avoided by the use of the word "in" when referring to January of 2015 or by including a date certain, such as January 1, 2015.

Request: **Insert into GOs and Information Sheets a date certain instead of "January, 2015" - preferably "January 1, 2015" - for clarity.**

- Valley previously commented that the GOs' discussion of documents compliant with the California Environmental Quality Act (CEQA) was too narrow and suggested that the list be expanded to allow "other environmental documents," such as a Notice of Exemption. While the language across the GOs in Finding 2 was modified as requested, the language in Finding 60 of GO1, Finding 58 of GO2, Finding 57 of GO3, and in the Information Sheet and Attachment B were not similarly modified and should be changed to reflect the longer list contained in Finding 2.

---

[3] In fact, the Tulare Basin Plan states that the main solution, short of a brine line, is "to manage the rate of degradation by minimizing the salt loads to the ground water body." Basin Plan at IV-5. This regulation by concentration does not address salt loads, and is inconsistent with the salinity objective that allows for managed degradation in groundwater. *Id.* at III-8 and Table III-4.

[4] The "to pond(s)" language is not found in GO Two, Finding 1.c. This is yet another instance of inconsistent findings/language across the GOs.

Request: **Modify the requested findings in the GOs and Information Sheets in the CEQA section to include "other environmental documents" similar to the changes made in Finding 2 of the GOs.**

- In addition, it is unclear why the GOs' and Information Sheets' references to CEQA exemptions continue to ignore some key exemptions that should be included, such as Water Code section 13389 and California Code of Regulations, title 14, section 15263. *See* Finding 59 of GO1, Finding 57 of GO2, and Finding 56 of GO3.

Request: **Include the other CEQA exemptions suggested.**

- Finding 19 of GO1, Finding 17 of GO2, and Finding 19 of GO3 each reference Water Code section 13263(a), but ignore a key provision of that statute, which requires consideration of the provisions of Water Code section 13241, including economic provisions. This language must be inserted to be consistent with the Water Code requirements, and the economic impacts of these GOs must be part of the consideration when crafting the discharge requirements.

Request: **Insert "and the provisions of Section 13241" into the discussion in the GOs and in the Information Sheet for GO3 about Water Code section 13263.**

- Each of the three GOs discuss the Sources of Drinking Water Policy, but each includes different language and none reference the Regional Board's incorporation of that Policy into the Basin Plan under Resolution 89-098.[5]

Request: **Make the discussion of the Sources of Drinking Water Policy consistent in the GOs and reference Regional Water Board Resolution 89-098 instead of State Water Board Resolution 88-63.**

- GO3 states that "exceptions to the Sources of Drinking Water Policy are not self-implementing, but must be established in an amendment to the Basin Plan." There is no citation to authority for this statement, and this statement is not completely accurate because Resolution 89-098 did not designate any waters that met the exceptions contained therein. Resolution No. 89-098 stated the following:

> "[B]e it RESOLVED, that all surface and ground waters within the Tulare Lake Basin which currently have no beneficial use designation are hereby designated municipal and domestic supply (MUN), ***with the exception of***:
>
> 1. Surface and ground waters where:

[5] Instead the GOs discuss State Water Board Resolution 88-63, which was invalidated by the Office of Administrative Law in Determination No. 8 as being contrary to the California Administrative Procedure Act ("APA"). (Gov. Code, §§11346-11346.8.)

a. The total dissolved solids (TDS) exceed 3,000 mg/L (5,000 us/cm, electrical conductivity) and it is not reasonably be expected by the Regional Boards to supply a public water system; or

b. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices; or

c. The water source does not provide sufficient water to supply a single well capable of producing an average, sustained yield of 200 gallons per day….

3. Ground waters:

a. Where the aquifer is regulated as a geothermal energy producing source or has been exempted administratively pursuant to 40 Code of Federal Regulation (CFR), Section 146.4, for the purpose of underground injection of fluids associated with the production of hydrocarbon or geothermal energy, provided that these fluids do not constitute a hazardous waste under 40 CFR, section 261.3;

and be it further RESOLVED, that the above criteria not withstanding, waters presently used for municipal and domestic supply are hereby designated for protection as MUN…." (Resolution 89-098, italic and bold added, underlining in original.)

Despite this clear language, the text of the Basin Plan states that:

> Due to the "Sources of Drinking Water Policy," all ground waters are designated MUN (the **use may be existing or potential**) unless specifically exempted by the Regional Water Board and approved for exemption by the State Water Board. (Tulare Lake Basin Plan, at pg. II-2 (emphasis added).)

Requiring a de-designation process where the designation never legally occurred is nonsensical and a waste of resources by all parties. Instead, where no evidence supported an existing MUN use in 1989, which is the case for many ground waters in Kern County at the time of designation, the waters were not designated by Resolution 89-098 cited above.

Request: **Remove the sentence from Finding 24 of GO3 stating that the exceptions are not self-implementing. Further, instead of having GO3 require a full de-designation process for MUN use, GO3 and the accompanying Information Sheet should allow an alternative to de-designation by demonstrating one or more of the exemption criteria existed in 1989 and the groundwater influenced by the discharge is not a currently existing use.**

- If, assuming arguendo, a designation did occur pursuant to Resolution 89-098, then the Regional Board should interpret that designation, without further evidence of existing use of that water for domestic and municipal supply, as only a ***potential*** MUN use. The California

Supreme Court has held that "source of drinking water" means any water *currently* destined to be used as drinking water. Treating all water as an existing use, when it is only a potentially suitable source of drinking water "would greatly extend the reach of the statute, and would lead to absurd circumstances (like, for example, protecting brackish lagoons which never could be used for drinking water, but would still be designated 'potentially suitable.')" *See People of the State of California and the City of San Diego v. Kinder Morgan Energy Partners, L.P. et al,* US Dt. Ct for Southern District, Case No. 07-CV-1883 W (AJB), ORDER on Motion to Dismiss (2008) *citing People ex rel. Lungren v. Superior Court,* 926 P.2d 1042, 1049 (Cal. 1996). Potential uses need not be protected in the same manner as an existing use. Different objectives could be adopted to apply to potential uses, or substantially longer compliance schedules could be allowed to meet current objectives. (*See Cal-SPA v. SWRCB* (2008) 160 Cal. App. 4th 1625, 1641 ("the adoption of site-specific [ ] objectives is demonstrated by the record to be protective of this possible beneficial use.").) Further, the Porter–Cologne Act requires the Regional Board to set water quality objectives at limits or levels that provide for the "***reasonable,***" not complete and total protection of beneficial uses of water in the specific area. (*County of Sacramento v. State Water Resources Control Bd.* (2007) 153 Cal.App.4th 1579, 1583 *citing* Wat. Code § 13050, subd. (h).)

Request: **Treat MUN (or other use designations) as merely a potential use absent evidence that the use is an existing use. Conform the requirements of the GOs to protect existing and potential uses differently.**

- GO3 should not require use de-designation, but should allow dischargers to choose de-designation or offer an Alternative Compliance Pathways (ACPs) to be used instead. For example, the Basin Plans now include exception and variance provisions that could be used in lieu of modifying the use. Alternatively, a discharger might propose a site-specific objective(s) that would be protective of actual existing uses. Forcing all dischargers under GO3 into a long, costly Basin Plan amendment process is unnecessary. In addition, as discussed previously, GO3 should allow dischargers to demonstrate that MUN was not an existing or probable future use in 1989 when MUN uses were otherwise designated as an alternative pathway.

Request: **Allow more flexibility for other Alternative Compliance Pathways besides only use de-designation.**

- Finding 27 of GO2 and Prohibition 10 of GO2 and GO3 (and the corresponding sections of the Information Sheets), along with Provision A.11 of the Standard Provisions, present potential problems for dischargers. On the one hand, discharges of produced water are being authorized, but a prohibition disallows discharge that "results in the creation of a condition of pollution or nuisance." Since it could be argued that discharge above the maximum salinity limits could cause such conditions, the permit is unworkable as written. The requested change would be consistent with the Information Sheets' statement that the GOs' requirements "ensure they [the discharges] do not cause pollution or nuisance conditions."

Request: **Modify GOs and Information Sheets related to Prohibitions to specifically state that discharges in compliance with the GOs' discharge specifications will not be considered to cause a condition of pollution or nuisance.**

- The Information Sheets for GO1 and GO2 include a section titled "Oil Field Discharges and Proposed Discharge Limits" with an extensive discussion of why limits are not being included for certain constituents. This section should also be included in GO3.

Request: **Include section titled "Oil Field Discharges and Proposed Discharge Limits" from the Information Sheets for GO1 and GO2 into the Information Sheet for GO3.**

Comments on the MRPs:

- Inconsistencies between the three MRPs still exist without explanation for the differences. For example, GO1 does not contain the following language about groundwater monitoring:

  > "If the Discharger demonstrates that the wastes discharged to the ponds cannot affect the quality of underlying groundwater, the Executive Officer [EO] may rescind by signed letter all or part of the requirements to complete the groundwater investigation and groundwater monitoring portions of this Order."

  Given the high quality of the water in GO1, this would seem to be an important provision to avoid expenditures on monitoring that may be unnecessary. In addition, it is unclear why three wells would be required for GO1, when the discharge meets high quality standards. Perhaps a single well downgradient of the facility would suffice as the standard requirement, or assessing leakage as was done at Valley's Fee 34 Facility.

Request: **Modify GO1 to require fewer groundwater monitoring wells and less frequent monitoring since the discharge specifications should be met by these discharges, and include a provision in GO1 allowing for the EO to rescind all or part of those requirements as well.**

- The MRP is not as clear as it could be on the number of monitoring wells that are required. The current language requiring "three groundwater wells, with at least two wells located downgradient from the ponds' location" could be read to require new wells or wells for each pond on a multi-pond site.

Request: **Modify the Groundwater Monitoring provisions of the MRPs to explicitly state that existing wells may be used as monitoring wells if upgradient or downgradient of the ponds at the Facility. The information sheet should also specify that these wells are not needed for each pond, but can be located to monitor the Facility as a whole even where there are numerous ponds onsite.**

- The MRP appears to say that groundwater monitoring will not be required if the discharger demonstrates that "wastes discharged to the ponds cannot affect the quality of underlying groundwater." If this language means that a Title 27 double lined pond with leak detection will not have to have groundwater monitoring, then this should be made more clear.

Request: **Clarify which ponds will not require groundwater monitoring.**

- The MRP requirements for testing and reporting frequency are costly, unnecessary and onerous. The MRP allows a request relief from these requirements, but this process is unwieldy.

Request: **The MRP should be revised to allow requests for modification with a more automatic approval if not addressed by Regional Board staff in a certain timeframe, such as: "A proposal for reduction in monitoring frequency, with adequate technical justification, may be submitted in the annual monitoring report. If the discharger does not receive notification that the request is denied within (60/90/120) days, the request will be considered approved." This would be efficient for both dischargers and Regional Board staff who will only need to address inappropriate requests.**

- The MRP generally requires permanent markers/gauges and 2 feet of freeboard for ponds. However, where water levels in the ponds are automatically controlled by weirs, there is no need for a permanent marker requirement.

Request: **Modify language in the first sentence in section on "Facility Monitoring" regarding markers in ponds, as follows: "Permanent markers in ponds <u>that do not have fixed, automatic water level control</u> shall . . . ." Further, the MRP and GOs should explicitly recognize that ponds with automatic water level control (such as a fixed outlet weir or an outflow pipe connected to a downstream pond) do not require a 2-foot freeboard for safe and proper functioning.**

- The "Facility Monitoring" section of the MRP requires monitoring and recording of on-site rainfall using automated rainfall gauges everywhere. This blanket requirement for on-site precipitation data is both expensive and not well justified based on climatology.

Request: **Modify this requirement to read: "... using an automated rainfall gauge or rainfall data collected within three miles of the site."**

- The MRPs require extensive produced water and chemical additive monitoring. These quarterly monitoring requirements are onerous when required quarterly. Maybe the MRP should require two years of quarterly data collection and then change the frequency to annual automatically for constituents not present at levels of concern. This request is consistent with the State Water Board's request that monitoring not be done for monitoring sake, especially where the cost to do so is high and the data received has little continuing value.

Request: **Modify the MRP requirements to require the initial reporting requirement frequency to be quarterly, but reduce this automatically to annual for all constituents that consistently register non-detect or below the applicable water quality objective.**

- Table 1 of the MRP lists every possible water quality constituent. This overinclusion, particularly where the discharger has already characterized its discharge, makes the quarterly

monitoring requirements expensive and sometimes pointless. For instance, the isotopes of oxygen and hydrogen are properties of the water, not the oil field wastes. These constituents are also not particularly susceptible to change, but the monitoring frequency is quarterly.

Request: **The unreasonable amount of analysis being required in the current draft MRP by the Regional Board should be corrected.**

Comments on Attachments:

- There is no legal basis for the currently proposed definition of degradation, and the proposed definition conflicts with Water Code section 13241, which states: "it is recognized that it may be possible for the quality of the water to be changed to some degree without unreasonably affecting beneficial uses." Just because water quality changes or is measurable does not mean that degradation is occurring.

Request: **Modify the definition of "Degradation" in Attachment A to be: - "Any measurable adverse change in water quality that adversely affects beneficial uses."**

- GO3 fails to include the definition of "High Quality Water" contained in Attachment A for GO1 and GO2. These Attachment A documents should be identical and should apply to all three GOs, thereby eliminating the need for 3 different documents.

Request: **Have just one Attachment A and Attachment B applicable to all three GOs and make them identical. If this request is not granted, then GO3 should be amended to add a definition of "High Quality Water."**

- As with the comment on the GOs above, the definition of "New Production Facility" should specify an exact date. The term "from January 2015" is unclear.

Request: **Modify definition of "New Production Facility" in Attachment A to be: - "A production facility at which the Discharger proposes to or begins to operate ~~from~~ after January 1, 2015."**

- Similar to the comment on the GOs, Attachment B should include "other environmental documents" besides those listed in Facility Information section A.1.b.

Request: **Modify Section A.1.b. of Attachment B to read: "…the Discharger will need to provide evidence of compliance with the requirements of CEQA in the form of a certified Environmental Impact Report, Mitigated Negative Declaration, ~~or~~ Negative Declaration, CEQA exemption, or other environmental document."**

- Provision D.1.f. of Attachment B for GO1 and GO2 includes a statement that: "The burden of establishing that water quality degradation is in conformance with Resolution 68-16, rests with the project proponent. This is a statement, not a direction, or a task that can be fulfilled.

Request: **Modify Provision D.1.f. of Attachment B for GO1 and GO2 to be C.1.f [Section C is missing from these documents so renumbering throughout is needed], and to read: "Demonstrate that any water quality degradation that may be caused by the discharge is in conformance with Resolution 68-16," or move the current language to an explanatory footnote or to the information sheet.**

Other Comments:

- The GOs should be checked against the Standard Provisions and duplicative or contradictory provisions should be removed from the GOs. In addition, all references to the Standard Provisions should reference "as applicable" since many of the Standard Provisions do not apply (e.g., Annual Pretreatment Report Requirements only apply to municipal wastewater facilities, not to oil field discharges).

Request: **Remove provisions from the GOs that duplicate or contradict the Standard Provisions, and include with all references to the Standard Provisions the term "as applicable."**

Valley greatly appreciates being able to communicate its concerns with these permits at this early stage of the adoption process and hopes to continue to work cooperatively with Regional Board staff to assist in the adoption of workable permits for produced water discharges. Should you have any questions regarding this submittal, please contact me or Valley's Regulatory Affairs Advisor, Christine Zimmerman, at (661) 410-7500.

Respectfully Submitted,

DOWNEY BRAND LLP

Melissa A. Thorme

cc: Russell Emerson, Manager, Valley Water
W. Dale Harvey, CVRWQCB, Fresno Office
Patrick Pulupa, Regional Board Counsel
Gary Carlton, Kennedy/Jenks
Bob Gore, CIPA

1450092.1